CRM BULLETIN

Volume 13 No. 6 Cultural Resources Management • National Park Service 1990
A Technical Bulletin for Parks, Federal Agencies, States, Local Governments, and the Private Sector

More on Historic Structure Reports

Randall J. Biallas

In Volume 13, Number 4 of the *CRM Bulletin* there were several articles discussing Historic Structure Reports (HSR) including the preliminary recommendation by the HSR task force for a new conceptual model. In this issue are four additional discussion articles, and one response article and a letter on the original articles.

Blaine Cliver, chief of the WASO Preservation Assistance Division and mentor of some of the best comprehensive HSRs that the Service has produced, discusses the methodology of researching historic structures and how scientific materials analysis should play an important part. Chief historian Ed Bearss reflects his own highly personal historical perspective on this report type based on his 35 years of NPS service. Based upon his experience as park historical architect at Golden Gate NRA, Ric Borjes describes how a HSR can be produced relying heavily on existing "building files." Rick Cronenberger, historical architect, Rocky Mountain Region, proposes how the automated Inventory and Condition Assessment Program (ICAP) can be used to collect and record basic data on a historic structure for a variety of purposes and programs including producing a HSR.

A group of historic architecture professionals from the Building Conservation Branch of the North Atlantic Cultural Resources Center responded in an article to the proposed new conceptual model stating that a HSR's "primary—even exclusive—purpose... is to **document** a structure. " And lastly, the chief of the Park Historic Preservation Division in the Western Region, Tom Mulhern, states in his letter to the editor that the purpose and use of the HSR in both the ideal and "real world" needs to be considered.

Based on the articles that have been published and other comments received, we will be developing over the next few months a revised definition and guideline for the preparation of a HSR on which we hope to reach a consensus after full consultation with the park historic structures program field leadership. This definition and guideline will be furnished to the task force that will begin revising the *Cultural Resources Management Guideline, NPS-28* in fiscal year 1991.

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The HSR:
Its Production and Cost

E. Blaine Cliver

Previous articles have discussed the evolution of the Historic Structure Report (HSR), what is HSR, and how it should be used. This article will discuss the methodology for producing a HSR, and the effect on the cost of its preparation.

In the past there has been discussion of the "scientific" approach to HSRs, and the need for doing materials analysis. This type of approach has led some managers—and professionals—to feel that science, or analysis, is an embellishment that only can make the report cost more. Such a conclusion is a misunderstanding of the nature of architectural research, and it is the purpose of this article to address that issue. Simply put, the research of existing structures, or of the remains of once standing structures, is by nature the study of a physical object. As with archeology, the past of a structure can be studied through the physical remains of that structure; such a study might be called **architectural archeology.** The study of historic architecture involves the collection of data. This data can come in many forms: written, photographic, graphic, architectural and material. The use of data from the first three forms has been used traditionally by both architects and historians. Study of standing architecture, through observation and measurement, also has been a traditional form of data collection. It is the use of scientific means to characterize the constituent material through analysis that has added an additional dimension to the investigators tool box.

In this sense, analysis should not be seen as something separate, but needs to be viewed as an integral part of the data collection process. To understand not only the morphology, but also the pathology, research on historic structures must be holistic. As has been pointed out in earlier articles, HSRs done in the past have been fragmented; the historical data section may have preceded the architectural data section by years U not decades. A holistic approach uses all data in reaching conclusions. This data may be collected by several professionals, of different disciplines, from a number of sources, but the syntheses of the information is in one section. To do otherwise would be similar to the blind men attempting to describe an elephant; each description is based on limited information, and therefore, differs from one another.

Because any research, whether documentary or physical, must have some control over the effort that is expended in the collection of the data, parameters must be set. To set such parameters the purpose of the research needs to be understood, not only by the researcher, but also by management. The amount of effort required should be determined by: (I) the use to which the information will be put (from extensive restoration to the repair of a roof), (2) the level or significance of the structure (for some structures we cannot afford great efforts), (3) the availability of information (well researched structures may have considerable documentary data available, others may require extensive investigation to find sources of information), and (4) the existence of accessible physical fabric (the extraction of the physical information may be too destructive to the structure or the type of material may not provide useful information).

In setting parameters for research, it is often best to envision the information that is to be collected as providing answers to specific questions. Obviously, the effort required will be partially determined by what is needed to achieve the treatment goal, i.e., restoration, preservation, repair. Determining what is needed to achieve this goal can be done through the formulation of questions. These questions should be specific to the objective. For example, if restoration of a roof is required, the questions should be formulated to provide the information necessary to accomplish the work. In this case, one might ask what is the type, size and exposure of the roof covering? How was it fastened? If color is involved, what was the color? The researcher then needs to collect data to provide the answers.

However, this collection of data should not be approached in a hit-or-miss manner. It is here that the researcher must reach into the data collection tool box.

Research methodology is important in controlling the cost of any research project. Therefore, the greater the number of tools available to the researcher, the more flexibility there is for selection of not only an economical approach, but one that will develop precise answers. Returning to the restoration of the roof, the questions may be answered by finding the earlier specifications for the installation of roof covering. However, if these documents are not already on file they either may not exist, or their location must first be determined if access to them is to be obtained. Such research may take time (time is money) and not indicate what actually was done to the roof since specifications are not always followed. In this case the building may offer the most immediate answers if the evidence of the earlier roof covering remains. Understanding nail manufacture and the dating of nails is a tool that would help to identify the type of roof covering from a specific period. Nail patterns in the sheathing can provide the amount of exposure to the weather if the covering was shingles. Color and type of material may come from reused pieces of roof covering or from scraps of this material that have fallen into cavities.

For a small roofing project, such data might be collected in a matter of hours. If the building is of a high level of significance, further confirmation of the physical data collected from the building might be sought from documentary sources and photographs. Therefore, to feel that all HSRs should involve extensive documentary research, physical investigation and materials analysis can set broad parameters for the research and involve unnecessary cost. The correct tools need to be selected to fit the job at hand. With an important structure, involving extensive work, many tools may be required. Only those tools that will provide not just data, but the data needed to answer specific questions, should be used. Making the decision on the type of tool to use requires training. To employ the use of paint or mortar analysis as a means of obtaining data requires an understanding of these techniques. Although paint may exist, if it has been stripped in the past, its value in providing the needed information may be limited, and not worth pursuing. To require a full paint analysis, in such a case, may be a waste of time and money. However, the use of materials analysis combined with other data can be an expeditious and economical means of data collection, and is part of the holistic approach.

How much should a HSR cost? The answer to this question is based on the effort that is **required** to provide the **necessary** data. Necessary data is that data which is needed to answer questions specific to the implementation of a treatment, to the formulation of a management decision, or to the development of a plan. Also, it must be understood that in doing any research, the selection of specific answers may be difficult. In collecting data for a specific question, data for unspecified questions may be obtained as part of the process. It is this data, although not required in the HSR, that should be placed in a data bank for future reference. A means of storing such data in an accessible format clearly is something that should be developed and become part of the HSR preparation process.

All HSRs need not be costly. They do need to be useful documents and it is to this end the required research should be directed. If this work is done by trained and knowledgeable individuals, working within a defined set of parameters, the resulting product should be a well-researched, cost-effective document that provides pertinent information for those in the present as well as for those in the future.

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The Chief Historian's Reflections on Historic Structure Reports and the Need to Redefine our Approach

Edwin C. Bearss

In the first year after I joined the National Park Service as historian at the Vicksburg National Military Park, the Washington Office issued a field order in 1956 requiring that a "Survey Report" outlining the history, conditions, and proposed work on a historic structure be prepared and approved by park management before physical work was commenced. Early in the following year Director Conrad L. Wirth signed a memorandum calling for a multidisciplinary approach to the preparation of a Historic Structure Report (HSR). The report was to include seven parts—administrative, historical, architectural, archeological, landscape, furnishings, and exhibit data sections—and a completion report. (An October 24, 1958, memorandum was the first official document to employ the term "Historic Structure Report.")

As park historian, I knew nothing of the thought and logic that went into the preparation of these guidelines, because in the mid- and late 1950s training—unless you were one of the select few to attend "Tolson Tech"—HSRs did not command high priority and cultural resources received scant attention at "Kowski College," which opened at Yosemite National Park in 1957.

The first HSR initiated under the new format in Region 1 (redesignated the Southeast Region in 1962) was prepared by Herbert Olson, then park historian at Virgin Islands National Historic Site (redesignated Christiansted NHS in 1961). Following a month's research expedition in the summer of 1957 to the Danish Archives, Herb prepared a HSR of 212 pages on Christiansted's Fort Christiansvaern. An outstanding report, it featured a historical data section and was accepted and approved by regional director Elbert Cox in August 1960. The Olson report served the Southeast Region as a model to provide guidance and standards against which future HSRs prepared in that region would be measured.

In 1959, with Mission 66 in progress and the approach of the Civil War Centennial calling the tune, the NPS planned to acquire title to the Dover Hotel—then known as the Surrender House—as an addition to Fort Donelson National Military Park. (The area was redesignated as a National Battlefield in August 1985.) As regional research historian, I was assigned the task of preparing the Historical Data Section of the HSR. To guide me, I was provided with copies of the memoranda, field orders, etc., heretofore cited, along with Olson's Fort Christiansvaern report. Regional chief of interpretation J.C. "Pinky" Harrington and regional historian James "Jim" Holland stressed that in preparing the historical data section, I was not to make any measured drawings or remove or analyze any fabric, because this was the responsibility of the historical architects, who at a future date were to prepare the architectural data section of the HSR. I was cautioned that to do otherwise would bring down on me the wrath of the formidable and forthright Charles E. Peterson. I was informed that because of the significance of the Dover Hotel to the park story, the documentary research into its construction history and events associated with the "unconditional surrender" was to be exhaustive.

In December 1959, following a field trip to Fort Donelson, Clarksville, and Nashville to collect documentary materials, I returned to my field office at Vicksburg and prepared the historical data section of the HSR. The core of the documentary materials were the papers of the Fort Donelson House Historical Association from 1927 to 1959. After collating them by years and stacking them in neat piles around my office, I went home for the evening. The next morning when I returned, I found, to my horror, that the janitor had sacked up the

documents and sent them out to be disposed of with the rest of the park refuse. Fortunately, they had not yet been burned, and I was able to retrieve them and continue with my research. The historical data section was submitted and accepted by regional director Cox in April 1960, and a narrative focusing on the "unconditional surrender," placing it in context, and documenting that certain events traditionally associated with the Dover Hotel had taken place elsewhere, was published by the *Tennessee Historical Quarterly (Vol.* XXI, Nos. 1 & 2, March and June 1962), under the title "Unconditional Surrender: The Fall of Fort Donelson."

Some three years later, in the summer of 1963, an Eastern Office of Design and Construction (EODC) team of student historical architects visited Dover to undertake preparation of the architectural data section of the HSR. The team prepared four sheets of measured drawings and took a number of photographs. While at Dover, the team removed siding to open up the building and facilitate future investigation of a building that had had an exceedingly complex structural history. Upon their return to academia the team did not replace the siding and planks they had removed, causing significant water damage, much to the annoyance of the park superintendent. In addition, there was no follow-up, and, although referenced in the drawings, no Architectural Data Section was completed by Service historical architects.

Finally, in 1971, Historical Architect Russell Jones of the Eastern Service Center was tasked to finalize the Dover Hotel HSR, which was distributed as an approved document by the Denver Service Center in June 1972, more than 12 years after I had completed the subject Historical Data Section. The report, as reproduced and distributed, featured Administrative, Historical, and Architectural Data Sections, photographs, the four sheets of EODC 1963 measured drawings, nine sheets of drawings prepared by Architect Jones to guide the proposed adaptive restoration of the Dover Hotel, and a Project Construction Proposal (PCP) estimate.

Earlier, in 1966, a major reorganization had been effected under the aegis of George B. Hartzog, Jr., who had succeeded Conrad Wirth as NPS Director in 1964. Under this reorganization, history research was centralized in the Washington Office History Studies Division headed by Chief Historian Robert Utley. Mr. Utley's staff included several historical architects, among them Charles Pope, a highly qualified but strong-willed professional. By bringing together a corps of historians and architects, it was assumed by NPS leadership that the preparation of HSRs, for which Utley's division would be responsible, could be standardized to meet management needs in a cost effective and sequential manner.

Several "model" integrated HSRs were prepared in 1966-67, featuring under one cover Administrative, Historical, and Archeological Data Sections. Under Architect Pope's leadership the data to be included in the Administrative Data Section was standardized, and it was agreed that this section of the HSR would be prepared by park management with input from appropriate discipline specialists.

In July 1968 another Hartzog reorganization was implemented that had far-reaching repercussions on preparation of HSRs. This involved creation of the Office of Archeology and Historic Preservation headed by Dr. Ernest A. Connally, with three divisions—Archeology, History, and Historic Architecture. Utley continued to head the History Division, and Joseph S. Watterson was at the helm of Historic Architecture with Henry Judd in charge of the in-house historic architecture programs. Responsibility for preparation of the two key discipline-related sections of the HSRs were, as they had been before 1966, divided. Spokespersons for their respective disciplines, in the occasional acrimonious debates that followed, as to what constituted a "good" HSR and the sequencing of them to insure a cost-effective completion of the various sections, were Mr. Judd and Roy E. Appleman, the latter a retired Army colonel who was a forthright and uncompromising advocate of the value of history in understanding a structure in its totality. In their debates, Hank Judd would cite Francis Wilshin's study, more than 500 pages long, of the "Stone House" at Manassas NBP, and point out that the study contained only one-

half dozen pages of data on the building's structural evolution of use to his profession in planning its preservation and restoration. The rest of the Wilshin report was devoted to a detailed history of the Warrenton Turnpike, local taverns, the Mathews family, and the two battles of Manassas. The Historical Data Section for four small outbuildings at Antietam NB (348 pages), Mr. Judd noted, contained minimal data on the buildings and more information on battle actions than even the most avid reader desired, and had cost more than $3,000, in addition to the historian's salary, to reproduce and distribute. The $3,000 was $1,000 less than the $4,000 programmed for the stabilization of these outbuildings.

Colonel Appleman reminded Mr. Judd that the historical architects frequently failed to meet deadlines in preparation of the Architectural Data Sections. By the time they did, year-end monies set aside for reproduction and distribution of the HSRs to the field had lapsed. He argued that documentary research into a building's history, in the interest of economy and efficiency, should be multi-faceted because the NPS has interpretive as well as preservation needs. Appleman also called attention to the failure of the project architects to prepare completion reports when physical work was finished.

Before these conflicting concerns could be fully mediated, Director Hartzog, to better integrate planning into cultural resource management, in April 1970, implemented yet another reorganization. Except for the chiefs of divisions, and a small support cadre to oversee policy and to provide professional support to the directorate, the historians and historical architects assigned to the Office of Archeology and Historic Preservation were transferred to the field, most being sent to the Eastern Service Center, but a few to the Western Service Center. In the winter of 1971-72, the service centers merged and became the Denver Service Center (DSC).

Merrill Mattes, with more than 30 years' service and a good track record as a historian and manager, headed up the DSC's historic preservation team. Mattes integrated planning, research, and projects into a system that enabled the NPS to complete on schedule the multi-million dollar historic preservation and development undertakings associated with the Bicentennial of the American Revolution and the Bicentennial Land Heritage Program. A large number of HSRs were prepared to support these projects and accorded with the organizational structure scheme defined in the Ac*tivities Standards*, calling for four sections—administrative, historical, archeological, and architectural. The physical work was to be recorded in a new report called a "Historic Structure Preservation Guide" (HSPG). Unfortunately, the track record for preparation of HSPGs, until the mid-1980s, was no better than for the Completion Reports previously called for. A task directive, to be reviewed and commented on by the park and the Washington Office and approved by the responsible regional director, was developed to serve as a contract between DSC and the client, defining the scope of work, costs, and product. Until the mid-1970s, and the re-establishment of cultural resources professionals in the regional offices, the oversight provided HSRs was minimal. Washington Office review by Historic Architecture, until Randall Biallas entered on duty, in 1980, was at best superficial, because Mr. Judd, an outstanding hands-on historical architect, eschewed paperwork and writing critiques.

In October of 1980, the NPS issued Release No. 1 of the *Cultural Resources Management Guideline (NPS-28).* The continued inability of the NPS to produce an integrated HSR featuring the required sections, the accumulation of masses of superfluous research into buildings of marginal significance with detailed social histories of the occupants, and the high costs of the reports as contrasted with available treatment funds cried out for drastic action. The measures taken to address these issues called for the inclusion of only three components: an administrative data section, a physical history and analysis section, and an appendix. Release No. 2 (1981) and Release No. 3 (1985) of *NPS-28* continued this practice.

This led to improvements, but problems have persisted. In the nearly nine years that I have had shared responsibility for Washington Office review of HSRs, I have noted that: (a) too many reports continue to be submitted in the pre-1980 format with discrete historical and architectural data sections; (b) the discipline specialists fail to coordinate history, architecture, and archeology research to produce an integrated multidisciplinary document; (c) costs continue to be too high, e.g., the HSR for the Hampton heating system, a fairly small and not highly complex property, was programmed at more than $45,000; (d) the personal interests of the preparer rather than the needs of the NPS or the significance of the structure too often guide the level of historical research; (e) management and the historian continue, inappropriately, to seek to answer interpretive needs through the HSR; (f) certain HSRs fail to address the issues and problems defined in their task directives, e.g., the HSR on the Old Courthouse at Jefferson National Expansion Memorial; and (g) there is an unnecessary belief that any intervention into the fabric of a structure listed in or eligible for listing in the National Register mandates a full HSR featuring all elements as defined by *NPS-28*.

Concerned about these issues, along with others raised by management and articulate and perceptive members of his profession, former NPS Chief Historical Architect Michael Adlerstein, soon after reporting for duty in the Washington Office, convened a task force to review how to make HSRs more responsive to the needs of management in a cost-effective manner that protects resources and insures that the Service addresses its responsibilities under the 1916 Organic Act and the National Historic Preservation Act of 1966, as amended. The task force report and related articles were published in the *CRM Bulletin*, Vol. 13, No. 4.

"Building File" HSRs: Hope for Golden Gate NRA

Richard A. Borjes

As a member of the task force for the redefinition of the Historic Structure Report, I brought to the January 1990 meeting healthy concerns for the management of the over 700 (at present count) historic buildings in Golden Gate National Recreation Area, including the newly acquired Presidio of San Francisco. HSRs are needed for these resources that will provide direction to management, the preservation professionals and to proposed building users. As is the case for the entire National Park System, precious little funding or time exists to provide these needed HSRs.

The recommendations of the task force loosen the traditional concept of the HSR. During the January meeting, a "building file" concept of a HSR was put forward (described by Billy Garrett in his *CRM Bulletin* article, "Historic Structure Reports: A Redefinition"). This compilation of existing data into a HSR provides some hope for Golden Gate.

The primary need for management of historic buildings in Golden Gate is to provide direction to preservation and rehabilitation work. Adaptive use of buildings is part of the park's enabling legislation. Profits from leases of some park buildings are applied back into maintenance. It is the best of all possible worlds for quick inhabitation of buildings. The General Management Plan provides specific direction to management on what uses are considered to be appropriate for each building in the park. To date, the Secretary of the Interior's Standards for Rehabilitation have been the minimum performance standards which have guided management and preservation professionals in decisionmaking.

In the beginning, building users tended to be low scale non-profit organizations and the Secretary's Standards provided adequate direction to building users and management. Today the situation has changed. The small scale organizations who moved into our buildings 15 years ago are growing in size, public recognition and ability to obtain funding. There is now a need to evaluate impacts and provide direction to proposed actions that must be outlined in Historic Structure Reports.

Perhaps 80% of Golden Gate's historic structures are military buildings. Many of the buildings are based on standard military construction plans. There is a great deal of information available on these buildings in existing files. Old military records taken over by the park contain information about the construction and subsequent modifications. National Register nomination forms have information on the significance of the structures. An abundant amount of historical information is contained in several historic resource studies. Lastly, the Section 106 compliance files contain decisions made on previous actions. At present, this information exists in several different locations throughout the park, regional office and in active Army files.

We recently attempted to produce a HSR following the "building file" concept in a contract with a private sector A/E firm. Under this contract the basic text for a HSR was pulled together from existing data but still followed the basic format of administrative data, physical history and analysis section. The cost was relatively low because the research was minimal.

The subject of the HSR is the Fort Mason Port of Embarkation which was designated as a National Historic Landmark in 1985. The Landmark district includes several warehouse and pier structures that constitute almost 150,000 square feet of space. Under a cooperative agreement, signed in 1978, a non-profit foundation leases space to a diverse group of organizations in line with the GMP.

The A/E firm pulled together the considerable database developed by the park in the 12 years of operating the Fort Mason structures. This information forms the bulk of the resulting document. In addition to existing information, the A/E performed a condition

survey of all structures. This survey was considered to be important to provide current data on preservation needs. Finally, to provide daily direction to the NPS and the foundation, the A/E extrapolated the existing data and provided guidelines for the most commonly requested structure modifications based on previous Section 106 compliance decisions, historic significance of the Landmark, and integrity and condition of the structures.

This HSR has turned out to be somewhat more than a building file but certainly less than a comprehensive study. In line with the recommendations of the HSR task force, this report was written for the "primary audience," that being park management and the user. The condition survey was completed to provide management with a clear picture of current preservation needs and the extrapolation of information into guidelines provides direction to the user for their future proposals. In addition, the action of rehabilitating structures that contribute to a National Historic Landmark district requires a high level of sensitivity to prevent the loss of historic character and fabric.

It is our hope that the Fort Mason Port of Embarkation HSR can provide a model for the other reports needed in Golden Gate. In cases where the use of a structure requires only minimal alteration, a simple "building file" may be sufficient to provide direction. However, rehabilitation of structures contributing to one of our Landmark districts may require the level of report compiled for Fort Mason. Certainly, as the National Park Service looks at leasing the Presidio of San Francisco a great deal of thought will have to be given to the level of information needed "up front" to provide adequate direction to management and potential building users. My hope is that the recommendations provided by the HSR task force can provide management and the preservation professionals with options to adequately protect our historic resources with the least extraneous effort.

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Integrating ICAP Into the HSR

Richard J. Cronenberger

It is becoming increasingly more difficult to properly plan and record the physical work performed on historic structures. Funding has not kept up with needs, and accomplishing major physical work is perceived as being more important to the protection of a structure than preparing documents such as Historic Structure Reports (HSR) or even final completion reports. Similarly, due to lack of funds and personnel, park and region maintenance files are not as up-to-date today as they were in the past. This has led to the loss of important physical information.

Reports and files, however, are very important for documenting work that is planned or has been completed on a structure. Lack of documentation leads to poorly repaired structures and wasted time attempting to determine the significance of the repairs when evaluating structures for eligibility or listing on the National Register.

How can the NPS get a handle on identifying repair needs and properly recording these repairs when the project is completed? The Rocky Mountain Region is exploring the use of the Inventory and Condition Assessment Program (ICAP) for collecting basic data to generate a HSR or Historic Structure Assessment Report (HSAR). There are several advantages to using ICAP. It is a standardized automated program; it is designed to interface with the List of Classified Structures (LCS), the Cultural Resources Management Bibliography (CRBIB), and the Maintenance Management (MM) program; it records the existing condition of each structure; it contains the important identification, management and historical information that is part of the LCS; it contains estimated cost for repairs of the structures by feature; and it contains information on the designers and improvements/modifications/repairs that have been completed over the years (the second version of ICAP, due in 1992, will have an expanded field for this).

A negative aspect to using ICAP as the primary means for collecting information may be that it is thought to be too time consuming and expensive (also the present attitude toward preparing HSRs and maintenance files). However, this information must be gathered for historic structures in some format anyway. On the positive side, while the HSR is typically a hard bound report that is difficult to modify and maintenance files are difficult to maintain, the ICAP does allow the efficient addition of new information at any time after the original assessment is completed.

Furthermore, the ICAP information collected would benefit several other program areas such as the MM program. All structures should have a condition assessment before work is scheduled. The ICAP program records this information and, if done carefully and thoroughly, can be uploaded to the MM program, thus meeting the MM requirements and having an updated deficiency report available to historic preservation programmers at the push of a button.

The Rocky Mountain Region will conduct a pilot program at Rocky Mountain National Park to update the National Register, LCS, and historic architectural information on historic structures using the National Register Program Integrated Preservation Software and ICAP programs jointly. The field work will be done by contractors. All work will be monitored by the regional and park cultural resource professionals. The (ICAP) information will be printed in the form of a Historic Structure Assessment Report (HSAR) and the data uploaded on the computer of the park chief of maintenance. By combining the requirements of several programs and using the computer cross-referencing and uploading capabilities, we can minimize duplication of effort and the amount of professional time required. If this project is successful, the region will allocate resources to further update information on our historic structures.

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HSRs: Documentation First

The Historic Structure Report task force chaired by Billy Garrett presented the results of their deliberations in a recent issue of the *CRM Bulletin* (Vol. 13: No. 4). The task force's specific recommendations were contained in the article, "A New Conceptual Model." The article presented here is the consensual response of the Building Conservation Branch of the North Atlantic Cultural Resources Center to the majority of those recommendations.

The Building Conservation Branch in Boston—formerly the North Atlantic Historic Preservation Center— has had 15 years' experience in preparing historic structure reports. Individual staff members have been preparing them for more than a decade. The number of reports produced annually varies, but averages around 8 to 10.

The focus of these reports has been influenced by several factors. These factors include the predominance of cultural—as opposed to natural—resources in the North Atlantic Region, the presence in the region of managers with backgrounds in fields such as architecture and history, and the growing interest in analytical techniques. A major influence has been the experience gained from working on so many different types of structures and writing HSRs about them.

The staff of the Building Conservation Branch (BCB) realizes that continual review and updating of NPS guidelines for HSRs is essential to obtaining the most useful product at the least cost. It is also agreed that portions of *NPS-28* need revision, both to resolve internal conflicts/ ambiguities and to respond to new trends in the treatment of structures in the National Park System.

The BCB disagrees, however, with what appears to be the task force's primary proposal for change: that historic structure reports can and often should contain substantial amounts of material relating to program development and implementation. This philosophy is embodied in recommendation 1 in the article, "A New Conceptual Model." (For ease of reference, the nine "measures"— or recommendations—cited in the article have been numbered in the order in which they appear.)

Recommendation 1 suggests that a HSR could be a traditional documentary effort, OR an essentially management-related report, OR a completion report. The potential for confusion in the planning, execution, and public reception of such HSRs is obvious. The language of the recommendation seems to have been written as a compromise between those who favor the traditional documentary focus and those who want to make HSRs more "relevant" to management.

It is the BCB's conviction that the primary—even exclusive—purpose of a HSR is to *document* a structure. This documentation is accomplished in two ways: through research into archival resources pertaining to the structure's history, and by physical investigation and analysis of the structure's fabric. Such a report should include measured drawings and photographic and graphic illustrations, and oral histories when relevant. It should convey the extent of structural fabric remaining from the various periods of the structure's history, and should include recommendations on how to stabilize, preserve, or restore the structure. Finally, it should include a management summary to make the findings of the report readily accessible and useful to NPS managers.

Such a HSR provides managers with the information they need to respond to virtually any developmental issue, whenever it may arise. It can be used to formulate planning documents such as the Interpretive Prospectus. The BCB has found that information uncovered during the preparation of a HSR can often broaden the understanding of the resource and its significance to its park's mission. The HSR can play a large role in the development of maintenance programs and schedules. It can be used in the preparation of plans and specifications for preservation or restoration projects. The HSR can help managers assess the impact of planned interventions such as the installation of

firesuppression systems and handicapped-access facilities. It can be used by specialists involved in curatorial, interpretive, and landscaping issues.

In short, the management issues current at the time a HSR is written are not necessarily the only ones that will ever crop up concerning the subject structure. Any HSR written to satisfy particular current issues may quickly become limited and obsolete. A HSR that is primarily a documentary resource, however, will continue to be useful for a variety of purposes.

The ideal, "exhaustive" HSR described above would not be suitable, of course, for a structure considered to be of limited significance. *NPS-28* already provides for a broad but less-detailed type of HSR ("thorough") for less-significant structures. Such a report would look at the entire structure, but would not include in-depth or invasive investigation. It could be expanded into an "exhaustive" report at a later date if the structure turned out to be more significant than originally thought.

There will be times when a significant structure must undergo work before a HSR has been written for it. One such time is when a particular structural feature needs immediate repair or replacement in kind. Such immediate and small-scale interventions can be accomplished without a loss of historical documentation if an "existing conditions and fabric evaluation" is conducted of the affected area before, during, and after the intervention work. In this way, roofs, porches, and other discrete features can be repaired or replaced in kind without losing the information inherent in the original fabric. The results of the evaluation would be incorporated into the HSR when it was written at a later date.

Larger-scale interventions in a historic structure also may be required before a HSR is written. An intrusion-alarm system may need to be installed, or electrical service may need to be upgraded. It is easy for managers to focus only on the issue at hand. However, such single-mindedness risks doing severe and irreversible damage to the historic structure.

The BCB suggests that a survey of a historic structure be made similar to a historic structure assessment report in such instances. This survey would be similar to but more extensive than those already being conducted for the HUDAT program. It would view the structure as a whole, then focus on the particular feature or aspect about to be altered in relation to the complete structure. The survey could be as brief or as detailed as time and money permitted, and could include archival materials analysis. Managers could use it for planning and compliance purposes; architects could use it for the preparation of cost estimates, with or without the inclusion of schematics. Finally, it could be expanded at a later date into a HSR if such action was desired. The survey itself would *not* be considered to be a HSR, however.

A brief historic structure survey could be used when extensive alterations are planned for park-owned buildings that are considered of insufficient significance to merit a HSR, but which are useful for purposes such as park housing. Ill-considered changes are undesirable even for structures of minimal significance. First, the appearance of every structure has an impact on the persons who see it, whether they be the visiting public or park staff. It is reasonable to expect the National Park Service to be sensitive to integrity in general. Second, even minimally significant structures within parks often relate in some way to the park theme, and their appropriate appearance can be critical in promoting that theme. Finally, close physical investigation of "insignificant" structures sometimes discovers that they are more valuable than originally thought.

The BCB staff also felt the need to comment on recommendations 3, 5, 7, and 9. Recommendation 3 proposes to "limit the scope of a HSR according to the availability of information in other convenient sources. " Our experience has shown that writers of HSRs must investigate primary sources of information in order to verify the accuracy and completeness of the information in those "convenient sources." Even National Register nominations have proved to be erroneous. The BCB also believes that one of the main values of a HSR is the way in which it pulls together in a coherent and related manner information from many sources. Without a well-researched HSR available to them,

managers must rely on a scattered, incomplete body of information of questionable accuracy.

Recommendation 5 appears designed to elevate the traditional completion report to the status of a HSR. The BCB heartily acknowledges the importance of completion reports, but does not believe that they should be confused with HSRs.

Recommendation 7 discusses the possible use of a matrix as a way of defining limits for research on HSRs. The article itself lists some of the hazards of using such a device, and the BCB believes that they are sufficiently serious to preclude its use.

Recommendation 9 suggests that the number of copies made of most HSRs be limited to 10. The BCB's experience has shown that having 10 copies of a HSR prepared through the Government Printing Office is neither sufficient nor economical. Copies need to be given, not only to the recipients cited in the *CRM Bulle*tin article, but also to contributors, universities with which the BCB has cooperative agreements, and the author. The BCB has found that a "run" of 30 copies represents a good balance between distribution, economics, and storage needs.

In summary, the BCB believes that redefining the content of HSRs as proposed would decrease the quality of the documentary information in them, and consequently the actions taken based upon them. We agree that HSRs should be a *basis,* a starting point, for "a dynamic, decisionmaking" process, but not part of it. We believe that a tightening and a sharpening is needed of our current focus on HSRs as documentary resources. We also believe that there is a need for managers to understand the ways in which this resource can be used to address a wide variety of their concerns. We do not think that this approach precludes "good information and clear thinking." In fact, it would seem to promote clear thinking, by reducing the confusion and conflict over what should and should not be included in a HSR. The NPS does need to approach its structures with a "proper balance between thoughtful consideration and action." However, it is impossible—and unnecessary—to accomplish all of this within the context of the HSR.

The Mammoth Cave National Park Planning Project: Cooperative SHPO-Federal Agency Cultural Resource Management

Bruce J. Noble, Jr.

This article will focus on Mammoth Cave National Park's role as the site of an ongoing cultural resource planning project previously written about in a story entitled "Integrating Survey, Planning and Compliance—A Model" included in the October-December 1988 issue of *CRM Bulletin.* The following material was adapted from a paper presented during the "Preservation Challenges for the 1990s~ conference held in Washington, DC on June 5-7, 1990 and will provide a summary analysis of the Mammoth Cave planning project as it nears completion.

Although the concept of "ecosystem management" has become a common theme for natural resource professionals, this approach has not really caught on among cultural resource staff who administer Federal agency historic preservation programs. Federal **land managing** agencies, in particular, must confront certain pragmatic obstacles before adopting an ecosystem management perspective. For example, given limited budgets to manage cultural resources extending across a large land area, can land managing agencies really expect to survey, evaluate, and register the complete universe of cultural resources located within their boundaries, let alone concern themselves with resource evaluation questions extending outside their boundaries? While such questions are both legitimate and difficult to answer, joint Federal agency-State Historic Preservation Office projects offer possibilities for resolving these concerns. One such joint project is currently underway in Mammoth Cave National Park in Kentucky.

The Mammoth Cave project, which began in 1987, involves a variety of players including the park staff, the SHPO (Kentucky Heritage Council), and the Southeast Region and Washington, DC offices of the National Park Service. Project financing came from Historic Preservation Fund money dispensed by the Interagency Resources Division of the National Park Service and also from the Commonwealth of Kentucky which provided a cash match. This funding allowed the Kentucky Heritage Council, which received the Federal funds and assisted with project oversight, to hire contractors to complete various components of the project.

The first step in the project required contracting for creation of an SHPO planning document. To facilitate preservation planning activity, the Kentucky Heritage Council divides the state into five geographic planning regions: Pennyrile, Bluegrass, Eastern Kentucky, Western Purchase, and Urban Areas. The planning process in each region begins with a "planning overview" which provides preliminary information about historic property types in the region, along with historic con- texts relevant to the evaluation of these historic properties.

Because no planning overview document had yet been assembled for the Pennyrile region, the project began by preparing a study entitled "The Pennyrile Cultural Landscape Planning Overview" which focused on the 38 county region in westcentral Kentucky which includes Mammoth Cave National Park. For the purposes of this project, the overview intended to provide a broader regional context within which to evaluate the national park's cultural resources. Furthermore, this initial planning overview allows the SHPO to expedite future cultural resource survey and registration work in the region. Individuals conducting surveys at the sub-regional level, which may consist of one or more

counties within the Pennyrile, can employ the regional planning overview to locate information about applicable historic contexts and expected property types.

With preparation of this body of context documentation underway, an additional contract allowed for a survey of historic properties in the park. At the conclusion of the survey, the contractor set about finalizing separate survey forms for the National Park Service and the Kentucky Heritage Council. The next step called for the development of draft historic context statements to provide documentary material for evaluating the significance of surveyed resources, followed by compilation of a multiple property National Register nomination for eligible properties in the park.

As the project evolved, two divisions in the Washington, DC office of the National Park Service—the Interagency Resources Division and the History Division—began to recognize many obvious similarities between multiple property National Register nominations and a related cultural resources document used in the national parks known as a Historic Resource Study. Given the numerous likenesses, both divisions worked jointly to develop a strategy for integrating the two documents into one. The resulting document would serve to nominate resources in compliance with Section 110 of the National Historic Preservation Act and would provide a body of information to assist in interpreting National Park Service historic resources to the public. The Interagency Resources Division assumed responsibility for producing this document. Although the staff time devoted to preparing this study added considerably to the overall length and cost of the project, this expenditure of time and money will lead to the development of model guidelines for similar National Park Service projects to follow in the future and also suggest ideas for reducing duplication in the preparation of other cultural resource documents.

In addition to providing a regional planning overview for the SHPO and a cultural resource survey and National Register nominations for the national park, the project also provided an opportunity to experiment with a strategy for inspiring Federal land managers to look beyond the immediate Section 106 process and implement comprehensive cultural resource surveys. Accomplishment of this objective came through linking the resource survey and resulting National Register nominations with the completion of a programmatic agreement. The significance of this accomplishment requires some additional explanation.

When a Federal land managing agency develops plans to build a road, initiate a timber cut, or issue a mineral exploration permit, work should not begin until cultural resource specialists determine what impacts the project will have on historical or archeological properties and, if necessary, develop a strategy for minimizing those impacts. This often leads to a narrow emphasis on mitigating the effects of specific individual projects. While acknowledging the importance of these mitigation efforts, this approach to Section 106 compliance can result in piecemeal preservation by providing no incentive to identify and evaluate cultural resources which do not fall within given project areas. Such a strategy discourages comprehensive knowledge of the resource base and means that Section 106 concerns arise every time the agency undertakes a new project. Not only does this cost more money over the long-term, but also dictates that the planning of future projects will not always include advance awareness of the location and significance of cultural resources located in the Federal land management area.

To counteract this situation, a programmatic agreement will culminate the Mammoth Cave project. By directing that a cultural resource survey and multiple property National Register nomination precede the programmatic agreement, the project design assured that Section 106 compliance could be conducted with a sound understanding of the location and significance of cultural resources throughout the entire park. Rather than encourage a limited project area focus, an effort to link park-wide survey, registration, and compliance assures the availability of solid information to assist in the planning of subsequent projects. Thus, the Mammoth Cave project blueprint encouraged park management to support comprehensive evaluation of cultural resources by promising a programmatic agreement which would specify both present and future Section 106 compliance options.

To return to the ecosystem paradigm and summarize various results of the Mammoth Cave project, what can be said about efforts to establish a broader context within which to evaluate park resources? Although completion of "The Pennyrile Cultural Landscape Planning Overview" represented an important step in the SHPO planning process by providing a comprehensive analysis of cultural resources within a large region, this document had less direct relevance for Mammoth Cave National Park. Given the study's broad regional focus, the document generally lacked sufficient local detail to assist with the evaluation of historic resources in the national park. However, the remedy to this matter is not necessarily the responsibility of the SHPO. Rather, in ecosystem-like fashion, the National Park Service (and other Federal land managing agencies) needs to adopt a parallel planning process which begins within the park area and works outward to encompass resources related to historic contexts which extend well beyond park boundaries.

Implementing this remedy would probably be less dramatic than first appearances might indicate. For example, the Mammoth Cave project required the development of a historic context entitled "Commercial Cave Development and the Growth of Tourism in the Mammoth Cave Area, 1849-1926." This body of context documentation assisted with the evaluation of various tourism-related resources within the park.

With little or no additional work, this same body of information would serve nicely to document the significance of tourism-related resources located outside the park. Indeed, at least one highway leading to the park is literally lined with various examples of "roadside architecture" intimately related to the park's tourism history. While park staff certainly has no obligation to survey resources located outside the park, nothing prevents sharing this context documentation with the SHPO staff for their use in surveying these same resources.

Other noteworthy advantages can result from cooperative projects. From an SHPO perspective, these joint projects would enable a SHPO to employ context material produced by the National Park Service to facilitate their efforts to add properties to the state inventory through the survey process and to produce additional National Register nominations. The context documentation will also help to further refine themes in the state preservation plan. In addition, if SHPOs and Federal agencies work together to develop historic contexts and defined property types along with the requirements for listing these properties in the National Register, the entire cultural resource management process will operate more smoothly and effectively. Some disagreements over resource eligibility may persist, but cooperative ventures will help to minimize such differences of opinion.

From the Federal agency perspective, adopting the ecosystem model as a guide for extending the outer edges of historic contexts beyond Federal land boundaries will provide a more effective basis for evaluating the significance of cultural resources. When looking at a small subset of cultural resources tightly clustered in a Federal land area, historic significance can be very difficult to determine. Trying to make significance decisions based on this restricted perspective can result in serious differences of opinion between SHPOs and Federal agencies. Broadening the evaluative context will provide agencies with a better framework for determining which resources have historic significance and which do not. Evaluation questions aside, familiarity with a larger universe of cultural resources will help connect Federal land managers with resource threats which may originate on land located outside the national park, forest, or preserve.

In the end, engaging in cooperative efforts in a world of limited time and money just makes good sense. These cooperative activities allow SHPOs and Federal agencies to stretch limited fiscal resources further and to recognize their mutual interests in preserving our significant historic resources and enhancing the cultural environment within which we live. Discovering the community of interests which exist between a national park and a SHPO staff, and improving the working relationship between the two organizations, represent the most significant achievements of the Mammoth Cave National Park planning project.

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Educating the Public

Diane E. Gelburd

In the past few years, many cultural resources specialists have discussed the need to reach out to the public more than we have in the past. People must become aware of, and concerned about, cultural resources to ensure their protection. In a recent *CRM Bulletin* on Interpretation (Vol. 13, No. 3), Sandra Weber encourages cultural resources interpreters to present cultural resources as integral parts of a cultural ecosystem, rather than entertaining nostalgic incidents of our past. "They (park visitors), and we, must begin to realize that cultural resources constitute our *cultural* ecosystem, the maintenance of which is just as vital to our survival as a healthy species as protection of the natural ecosystem. " l In that same issue, Kathleen Hunter affirms that "a sense of heritage is fundamental to the well-being of every individual and group, and a knowledge of that heritage is essential to full participation in society." 2 In the ensuing *CRM Bulletin,* Frank McManamon states that more professionals are seeing the need for a national effort to promote archeology. "Leaders in American archeology perceive that better understanding about archeology will lead to more preservation of sites and data, less site looting and vandalism, greater support for the curation of archeological collections and records, and a demand by the general public for more interpretation of and participation in archeology." 3 Most recently, this issue has been addressed by Jeremy Sabloff, president of the Society for American Archaeology. In the September 1990 issue of the SAA *Bulletin (Vol. 8,* No. 4), he observes that "fortunately, in recent years archaeologists have come to realize that they must change their tactics if they are to turn the tide in the preservation conflict. Informed by the successes of other preservationists, such as those concerned with environmental issues, they have begun to adopt the successful tactics of group efforts and public outreach.... Moreover, archaeologists have perceived that our undertaking to combat looting through legislation will be of no avail without a well-planned campaign of public education." 4

Some people may say that public education is not necessary. "Look at all the people who visit our parks" is often their retort. However, a *1988* National Science Foundation study revealed that only 37% of all American adults could recall that dinosaurs lived before the earliest human beings and 40% believe that alien creatures have visited earth.5 With such lack of knowledge, it is clear that we need to increase the public's awareness of our cultural ecosystem. There are many ways we can do that. Some of those ways are listed below. Implement one of them today.

We, as cultural resources specialists, have wonderful opportunities to promote and protect our cultural ecosystem. It is also our responsibility to do so. Please share your ideas and experiences on public outreach activities by writing to the Managing Editor, *CRM Bulletin.* And let's start working together to develop a well-organized public campaign!

1 Sandra S. Weber, "Interpreting Our 'Cultural Ecosystem'," *CRM Bulletin, Vol. 13 (3),* National Park Service (Washington, D.C. 1990), p. 1.

2 Kathleen Hunter, "A National Center for Heritage Education," *CRM Bulletin, Vol. 13 (3),* National Park Service (Washington, D.C. 1990), p. 20.

3 Francis P. McManamon, "The Many Publics for Archeological Public Education, *"CRM Bulletin, Vol. 13 (4),* National Park Service (Washington, D.C. 1990), p. 29.

4 Jeremy A. Sabloff, "Surveying the Field," SAA *Bulletin Vol. 8 (4),* Society for American Archaeology (Washington, D.C. 1990), p. 2.

5 Sharon Begley, Karen Springer, Mary Hager, Todd Barrett, and Nadine Joseph, "Not Just for Nerds," *Newsweek, Vol. CXV* (15) (April 9, 1990), pp. 52-64.

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Partnership for Preservation: An Alaskan Case Study

Kate Lidfors

During the past three years the Alaska Region has stitched together a patchwork of NPS programs with private, state, and international efforts to document and preserve the Russian heritage embodied in Alaska's Orthodox churches. Although the project may well span a decade or more, it is already proving a successful partnership of public and private interests and an effective use of the combined resources of NPS internal and external programs.

The impetus for the project came from several sources. NPS has established leadership in the preservation of Russian heritage in Alaska through its restoration and refurnishing of the Russian Bishop's House at Sitka NHP and the corollary international conferences on Russian America held in Sitka in 1978 and 1987. The dramatic opening of the Russian Bishop's House, attended by a Soviet delegation as well as hierarchs of the Orthodox church in America, served to spotlight NPS efforts throughout the state.

At the same time, as candles flickered before the restored icons in the Bishop's chapel, it became all too evident that we had beautifully preserved a specimen of cultural history that was rapidly losing the context in which its significance is understood. Four of the five Russian Orthodox churches which are National Historic Landmarks in Alaska are in seriously deteriorating condition. Most of the remaining 36 churches on the National Register of Historic Places are in as bad a condition, or worse. We are losing some of these buildings, as they are torn down or destroyed by fire. The icons and other furnishings, which were gifts from the Russian church and state or were brought to Alaska with the early missionaries, are deteriorating from years of smoke, excessive moisture, uncontrolled temperatures, and ill-advised preservation efforts.

Through the region's active program of Landmark monitoring, we have been acutely aware of these problems. Condition Assessment Reports (CAR) have been done for three of the NHL churches and Landmarks at Risk (LAR) brochures prepared. Private donations in behalf of Holy Ascension Church in Unalaska, Aleutian Islands, were the first deposited in the National Historic Landmark Fund. The CARs have proven to be important tools in assisting the Orthodox Diocese of Alaska to confront the scope of the problems, set priorities, and begin fund raising efforts. Both the CARs and LARs have been critical in educating legislators and private groups to the needs and specific solutions.

These NPS initiatives have been met by a corresponding concern in other public and private sectors of the state for the preservation of this unique heritage. The Icon Preservation Task Force (IPTF), founded three years ago by a group of scholars, artists, community activists, members of the SHPO and NPS staffs, and church representatives laid out a three-part preservation agenda: (1) inventory and documentation of historically significant churches and objects; (2) public education; (3) restoration and conservation.

The plan for Phase I, inventory and documentation, was to combine HABS architectural documentation with an IPTF-sponsored inventory of the contents of each church using the Automated National Catalog System with NPS technical assistance. The Church of the Holy Assumption (NHL) in Kenai, Alaska was chosen for the pilot project because of its historical significance, availability of documentary records, and road access. Although the present church was built in 1894, it is one of the best examples in Alaska of traditional Russian wooden church architecture and it numbers among its treasures many items from the first church built in 1849.

The inventory was launched in April, 1988 with funding from IPTF contributors and a grant from the National Trust for Historic Preservation. Several local airlines contributed

tickets for participants living outside of Anchorage, oil companies donated funds, and both Alaska Pacific University and the University of Alaska donated staff expertise. The team, headed by historian Barbara Smith, was comprised of the parish priest and a diocesan liaison, the photographs curator at the University of Alaska-Fairbanks, a freelance conservator, and a NPS museum technician.

The project catalogued 171 objects, including icons, vestments, liturgical utensils, and historic photographs. All objects were photographed in black and white, large format with color negatives and transparencies made for selected items. The final inventory package includes HABS drawings, computerized catalog, photographs, and a narrative report. Duplicate originals for this and future projects will be deposited in the Diocesan archives at Kodiak and in the library of Alaska Pacific University, Anchorage.

This first inventory provided both a model for subsequent projects and a product to demonstrate the value of the effort. In 1989 the Alaska State Legislature appropriated $42,000 to continue the inventory at Holy Ascension, Unalaska—the first parish of Bishop Innocent (Veniaminov), whose later Episcopal residence NPS has restored in Sitka. As at Kenai, the original church no longer stands, but the existing architectural jewel contains many items related to Veniaminov and a wealth of icons and objects from the Orthodox heritage on the Aleutian Chain.

The Unalaska project added an important dimension to the inventory process. During the Kenai inventory, the IPTF team realized that although they had excellent resource people available to access the religious and historical significance of items in the church, an understanding of the artistic importance of the icons would be necessary to ultimately establish priorities for conservation. Dr. Dean McKenzie, a specialist in Russian iconography from the University of Oregon, joined the team to provide artistic evaluation. His wife, an experienced oral historian, conducted interviews with parishioners on the history of the church in the community and, particularly, on the efforts of the local Aleut people to protect cherished icons during the World War II evacuation of the island.

HABS documentation at Holy Ascension was also a joint effort. IPTF hired an intern architect to assist the NPS HABS team to accomplish architectural documentation of the church. Two additional members of the team were young Soviet architects assigned to the Alaska region through the US/ICOMOS-NPS exchange program.

Recognizing that we may lose important resources before they are documented, regional historical architect Steve Peterson—the primary engineer of the IPTF and NPS cooperation on this project—together with HABS chief Bob Kapsch organized a two-year photo-documentation effort in which Jet Lowe, HABS photographer and Kim Hoagland, HABS architectural historian, would record all of the historic Orthodox churches in Alaska. This September the last of hundreds of miles of bush flight was logged, and the last of 45 churches was recorded on film.

The inventory itself will proceed, one site at a time, as funding allows. In the meantime, several legislators are pushing for restoration work. The Alaska Region is providing background for the legislative effort, while at the same time providing project planning assistance to the Unalaska church as it begins to raise funds locally for critical structural restoration work. To date $100,000 has been raised from the city, fishing industry, and private contributions, which has been used to hire an architect to prepare plans and specifications. Fund raising is underway for an additional $400,000 to do the restoration work.

Although this cooperative effort has already accomplished much, there are problems and frustrations. An orderly preservation planning process calls for completion of the inventory before priorities are set for restoration and conservation work. However, the public won't wait. We may get run over as the snowball gains momentum—but we can't afford to stop and watch it melt in place.

The more critical problem may be the lack of coordination for a project of this scale and number of participants. The IPTF has been successful at raising funds for specific projects, but has not been able to take the next step toward organizational maturity and hire

at least a part-time administrator. On the NPS side, although the regional curator, historian, and historical architect have all contributed time and resources to specific efforts, staff and funds are not available to us, either, to dedicate a project coordinator.

Nonetheless, two major documentation projects have been accomplished in three years with a great deal of public participation and support. Equally important, critical sources of support within the state are becoming educated to a long-term preservation agenda for these unique Alaskan resources.

Other rewarding, but unexpected, results may come with the addition of Soviet partners to these efforts. Ten years after we had invited Soviet participation in the restoration and refurnishing of the Russian Bishop's House, the cold war thawed and dialog began. The first visit of Soviet specialists to Sitka in June of 1988 has led to an exchange of mutual interests in the preservation of Russian heritage in Alaska and some preliminary contacts and proposals for joint work. Access to Soviet archives and scholars researching Russian-Alaskan topics can only enhance our efforts to understand and interpret the social and historical context of the Russian Bishop's House—and the significance of the missionary parishes represented in churches throughout Alaska.

Equally promising is this year's initial contact with the Andre Rublev Museum in Moscow, a center of study and restoration of Russian icon paintings and related arts and architecture. A visit to the Rublev this spring by the author and representatives of IPTF and the Library of Congress resulted in proposals to assist Alaska both in historical research and in the evaluation and actual restoration of icons. We are now planning a six-month visiting lectureship by a Rublev specialist who would assist in an IPTF inventory project during 1991 and provide seminars and lectures throughout the state on Russian church architecture and iconography.

Agendas are diverse in this patchwork of programs and people, but they are stitched together by a desire to preserve the remnants of Russian America in Alaska—epitomized by the restored Russian Bishop’s House, but equally present in fading Russian icons in remote and fragile churches. The Alaska Region will continue to provide both resources and imagination to support and inspire the work that remains to be done. In a time of acutely limited funding, we can make significant gains in preservation work through cooperative efforts such as this. But it requires us to patiently search out the pieces that will make the pattern whole and be a strong thread to make it last.

Kate Lidfors is the regional historian for the Alaska Region, National Park Service.

NPS Archives Advisory Committee Holds First Meeting

David Riggs

The newly established National Park Service (NPS) Archives Advisory Committee (AAC) held its first meeting in September 1990. The committee has 11 full and ex-officio members representing the Washington office, Harpers Ferry Center, regional offices, archeological centers, and individual parks. The committee was appointed to advise the Curatorial Services Division, WASO on NPS archival matters.

The revision of the *Museum Handbook*, Part II, Museum Records, Appendix D, which provides guidelines for cataloging archives and manuscripts is one of the committee's major objectives, as is the provision of guidelines for handling

• visual images. The revision is intended to increase both detail and clarity for cataloging archival and visual image material. A long range proposal is publication of a separate guide which will deal comprehensively with the management of archives.

The committee reviewed and commented on a National Archives and Records Administration (NARA) audit of audio-visual collections in NPS. In order that the NPS may fulfill its mandate of resource management and preservation, the committee recommended, contrary to several recommendations by NARA, that resource management archives be retained at their respective parks and centers and excluded from transfer to NARA.

Increasing access to a growing quantity of data was another topic of discussion. Although this process was started with the introduction of the Automated National Catalog System (ANCS) for computerized record keeping, the committee is investigating the adoption of USMARC (United States Machine-Readable Cataloging) data standards in the handling of archival and visual image materials. The committee stressed the need to maintain original order when handling archival collections.

The committee also recommended revisions of archival sections of management guidelines NPS-19, NPS-28, and NPS-77. Other recommendations included the addition of an archival component in the Scope of Collection Statement, promotion of guides to NPS collections, appraisal and deaccessioning guidelines, and procedures for acquiring papers from NPS affiliated organizations. Many of these recommendations are already underway and the NPS anticipates increased Servicewide awareness of its archival and visual image collections.

David F. Riggs is museum curator at Colonial National Historical Park, VA, and Archives Advisory Committee member.

Prehistoric Artifacts Returned to Arizona

Jean Alexander

Based upon material submitted by Hester Davis, Arkansas Archeological Survey.

A collection of 19 ancient Indian pots that was nearly sold at auction in Massachusetts has been returned to Homolovi Ruins State Park in Arizona.

Amateur archeologist Gordon G. Pond had removed the pottery 27 years ago from an underground burial chamber near Winslow on state land. This was a violation of the Arizona Antiquities Act of 1960, which forbids the removal of relics from state land without a permit.

In early 1989, having moved out of the state, Pond offered the pottery for sale, a violation of the Federal Archaeological Resources Protection Act of 1979. When word that the artifacts, listed as Homolovi pots, were to be sold reached Arizona, the State Board of Regents, acting on behalf of the Arizona State Museum, filed a lawsuit that successfully blocked the sale. Pond, against whom the museum sought no sanctions, gave up any claim to the artifacts. There are plans now to exhibit this 15th-century pottery at the Homolovi Ruins State Park, as these are among the few surviving artifacts linking the modern-day Hopi Tribe with their ancestors who lived in northern Arizona.

Arizona State Museum Director Raymond H. Thompson said in court records that although the museum cannot condone the sale of prehistoric artifacts from public land for private gain, museum officials "are willing to work with private individuals who have excavated on state land illegally when there's hope both of studying and acquiring the specimen."

Jean Alexander is copy editor for the *Federal Archeology REPORT;* which is published by the Archeological Assistance Division, National Park Service.

Preservation Technology Update

Principles for Preserving Historic Plant Material

Lauren Meier and Nora Mitchell

Historic landscapes are composed of a variety of features which define their historic character. The elements of landscapes include large-scale characteristics such as spatial relationships and views as well as individual features including topography, vegetation, water features, roads and paths, structures, site furnishings, and objects. Although certain landscapes are very architectural, the principal component which distinguishes landscapes from other types of cultural resources is vegetation. The use of plants in the landscape reflects social, cultural and economic history just as clearly as structures or any other feature. The fact that vegetation grows, changes, and eventually dies does not alter the fact that it is part of the historic record. Recognizing that vegetation is part of the historic fabric of landscapes, does, however, have a number of implications for preservation of this type of cultural resource.

This article addresses the vegetation of landscapes that have historic value, in particular, designed and rural vernacular landscapes (as defined in NPS-28: *Cultural Resource Management Guidelines).* It does not address ethnographic landscapes specifically, although some of the information presented here may be relevant. The intent of this article is to begin to draw some general principles and give examples of good practice in the treatment of historic vegetation. Also included are some preliminary ideas being developed for the *Guidelines for the Treatment of Historic Landscapes* which will interpret the *Secretary of the Interior's Standards for Historic Preservation Projects* for landscapes.

The Importance of Historic Vegetation

The cultivation, propagation, and artistic use of plants is an important part of American history. Prior to European settlement, indigenous plants were used extensively by Native Americans for food as well as for building materials, and for dye or ceremonial functions. Later, the cultivation of plants for subsistence farming grew into an American gardening tradition and the use of plants for purely aesthetic purposes. Colonial gardens borrowed both form and plant materials from their European roots, developing extensively in the 18th century English colonies.

Thomas Jefferson wrote "the greatest service which can be rendered any country is to add a useful plant to its culture. " The exchange of plants began very early in the history of North America. Native Americans had access to plants from Peru to Mexico and from as far away as Africa from Spanish traders. Before Columbus came to the New World, South American food plants had been carried north and east as far as Canada and New England. After European settlement, the plant ex- change between the English colonies and the New World thrived. Settlers brought plants as they journeyed to the colonies. Similarly, many plant explorers came to the New World to collect specimens. In the 19th and 20th centuries, accomplishments in plant cultivation, hybridization, and distribution along with additional plant exchange have continued to contribute to the diversity of plant species found in American landscapes. As a result, cultural landscapes found today contain a vast array of horticultural variety, including plants used for functional and aesthetic purposes.

Both native and introduced plants are part of our material culture. Even though often considered a natural resource, vegetation features may be significant cultural resources as well. For example, areas of natural vegetation, such as woodlots and wetlands, may also be present in historic landscapes. Without these character-defining features, much of the

historic fabric and visual qualities of the property may be lost. It is therefore essential to include proper treatment of historic vegetation in any preservation effort.

Evaluating Vegetation Features

Inventory and documentation, as well as analysis of existing conditions and overall integrity of the property, should precede any treatment work in a historic landscape. It is important to evaluate the landscape as a whole, as well as its individual components. Vegetation features may include solitary plants which function as specimens in the landscape, as well as aggregations of plants such as hedges, hedgerows, allees, ornamental plantings, perennial borders, orchards, fields, and lawns. In some landscapes, naturally-occurring vegetation may have acquired historic significance due to its association with a significant event, practice, or person. The treatment of these individual vegetation features must be consistent with the overall objectives for the property as a whole.

A variety of sources and techniques may be used to assemble adequate information on the historic vegetation of a site. Primary sources including personal diaries or journals, agricultural records, historic photos, paintings, etchings, and oral histories may all provide information about the historic appearance, care, or use of the vegetation. In some cases, as with designed historic landscapes, planting plans may also be available. However, in many instances, very little information on historic vegetation may be forthcoming. As a result, secondary sources such as historic horticultural texts may provide an indication of the type of vegetation used during the period of significance.

Through the process of assembling documentary data and field survey information, the historic vegetation location, use, appearance, and changes should be substantiated to the greatest extent possible. The existing vegetation should be inventoried and evaluated, including extant historic features as well as more recent additions and invasive plant material. The condition of the features should be determined as part of the field survey in order to assess their overall health and any specific treatment or needs. It is also important to consider the dynamic qualities of vegetation and understand how much of this inevitable change contributes to, or compromises, the historic character of the property. Finally, the existing appearance of the vegetation should be analyzed in relation to the historic documentation. The feature's condition, relationship to historic vegetation, and overall management objectives for the property will help guide the selection of an appropriate preservation treatment.

Preservation Treatments

Preservation projects involve one of the following treatments: protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. While these terms were initially developed to describe work undertaken on historic buildings, all relate to vegetation as well. Due to the nature of vegetation, these terms may represent very different types of work than is associated with historic buildings. The most common treatments for vegetation are protection, preservation, and restoration. These treatments are discussed below.

Protection projects generally involve measures necessary to guard against further deterioration or damage. For vegetation, this may involve actions necessary to protect the plant itself, or actions against plants which are themselves causing damage. In the latter case, it is important to distinguish between historically significant vegetation and that which is simply invasive or intrusive.

Historically significant vegetation that causes damage to or threatens historic structures should be controlled, rather than removed whenever possible, since the plants are part of the historic fabric of the property. This might involve temporarily removing the specimen, while undertaking treatment on the structure, or pruning the original material back to eliminate the problem. At the Olmsted National Historic Site, the original *Wisteria* and

Actinidia vines which historically covered the clapboard facade of the house were pruned back during the building's restoration. Now, the park's horticulturist is experimenting with a variety of trellis systems that will allow the building and vegetation to coexist, thus protecting **both** important features of the property.

In rural landscapes, fencing or other types of enclosures may be necessary to protect historic vegetation from damage from livestock or game, or from overuse by visitors. In southern orchards, smudge pots are often used to protect the trees from early frost damage. In northern climates, many historic plants require protective measures such as winter mulching, wrapping, staking, or other methods to protect them from snow, wind, or damage from severe freeze.

Another protective treatment involves integrated pest management (IPM) which may involve the careful use of pesticides or fertilizer to aid in the recovery of a diseased, injured, or deteriorated plants, or to protect the plant from further decline.

Preservation efforts for historic vegetation may focus on ongoing maintenance and management activities which perpetuate the historic appearance, structure, or components of the landscape. This includes mowing or harvesting which sustains the structure and open quality of a field, or any other cyclical maintenance project which is essential to retain the form and character of the vegetation feature. Preservation is the most important treatment since vegetation requires constant management in order to retain overall the structure or appearance of the landscape. The process of removal and replacement or renewal of vegetation is an important component of preservation.

Mowing and pruning are necessary and important maintenance practices, without which vegetation features may be lost or change dramatically and thus affect the historic character. Features that are composed of collections of individual plants such as allees, hedges, or massings of ornamental shrubs may require periodic replacement of individual plants. When the individual elements are deteriorated or missing so that the historic feature as a whole is no longer discernible, the entire feature should be replaced. This is a common issue for hedges, hedgerows, or allee plantings whose individual trees may have died or are deteriorated due to age or poor maintenance.

It may also be necessary to replace deteriorated, overgrown, diseased, or dying plant material in order to preserve the historic character of the property. Propagating existing historic plant material for replacement later on provides appropriate replacement material and helps to perpetuate the historic genetic material. In addition to replacement, regular removal of vegetation which crowds historic views or other significant landscape features may be required. Invasive vegetation that damages historic water systems, paths, roads, terraces, or structures, or causes the loss of a significant view or visual relation, should be removed.

In vernacular landscapes, continuing traditional maintenance practices or substituting modern management practices may be necessary to perpetuate the historic scene. In some instances, modern agricultural practices may not adequately preserve the historic scene because of the size of the fields required to accommodate modern machinery. In other cases, as in active rural agricultural communities, perpetuation of a particular crop may not be as important as the retention of the gross landscape patterns.

Restoration may require the removal of later additions and the recreation of missing features in order to reestablish the appearance of the property as it looked during an earlier period. For this reason, the historic vegetation, both extant and missing, must be adequately documented before the restoration effort begins. This includes gathering as much information as possible on the types of plants used on the site and comparing this information to the historic appearance. Secondary sources should also be consulted in order to substantiate dates of introduction into cultivation, the commercial availability of the plant varieties, and their popularity during the historic period.

The restoration of a historic property may require replacing an entire vegetation feature such as a hedge, allee, or field that is missing and which contributed to the historic character of the property during the period of significance. Missing historic vegetation

which did not exist during the defined period of significance and period of restoration should not be replaced.

Existing historic vegetation that was present during the period of significance and contributes to the historic character of the property should be protected and retained. Similarly, historic vegetation that has matured since the period of significance should also be kept as long as the scale and appearance of the feature does not compromise the historic character of the property. If the scale of the mature vegetation is not consistent with the character of the period for restoration, methods such as pruning or thinning which reduce the scale of the feature should be considered before removal. Replacing matured woodlands with new seedlings in order to create an appearance of the landscape as it appeared at an earlier date, when retaining the matured vegetation would have accomplished the same goals, is not an appropriate treatment. In cases where pruning or thinning does not accomplish the historic effect, the entire feature should be removed and replaced.

Often, replacement of lost historic vegetation is hampered by poor documentation or by the fact that many historic species and varieties are no longer available. (For more information on replacement and substitution, please refer to the following section).

Stabilization is generally considered a building treatment, since it is used to reestablish the stability of an unsafe, damaged, or deteriorated property. For vegetation, there are a few instances when stabilization may be appropriate, such as staking or cabling trees that have blown over or major pruning efforts which remove limbs that threaten the stability of the tree.

Since the objective of **rehabilitation** is to make possible an "efficient contemporary use," appropriate work may involve the preservation of the existing historic fabric or the introduction of new construction and features. New vegetation to screen new features or uses may be necessary to reduce the visual impact of the new features. New construction is often a component of rehabilitation, necessitating protective treatment of historic plant material. Trees will not tolerate damage to their root system without showing some kind of effect and thus should be adequately protected during site or building construction.

The historic use, appearance and type of plant material should be accurately documented before considering **reconstruction.** Reconstruction of historic landscapes should only be considered when sufficient documentation exists, appropriate materials can be found to accurately recreate the historic appearance of the property and when the interpretive objective for the property necessitates reconstruction. As with restoration, the historic vegetation should be incorporated into every reconstruction project.

Considerations for Replacement and Substitution

The Secretary's Standards for Historic Preservation Projects recommends that "new material should match the material being replaced in composition, design, color, texture, and other visual properties." This principle applies generally to vegetation, though the original species and variety as well as the plant's horticultural characteristics should also be considered. In many landscapes, at least some of the historic plant material is still extant. Since this material is historic fabric, it should be retained. Diseased or damaged vegetation should also be carefully cared for before removal and replacement is considered.

However, removal and replacement of existing historic material or the replacement of lost fabric may be necessary if the existing material is too severely damaged or diseased, or if it has overgrown and pruning will not accomplish the treatment objective. In landscapes where some of the historic plant material remains, opportunities exist for propagation and exact, in-kind replacement of the historic fabric. This option is not available for any other historic resource, and is one that should be used whenever appropriate. Propagation of existing plant material has many advantages including genetic continuity with the historic period. This is particularly important since the landscape itself is regarded as an historic record, and modifying that record should be avoided or minimized.

Often, identification of historic varieties is difficult and must be verified over several years. Purchasing replacement material for incorrectly identified extant material would, of course, result in inadvertent alteration of the historic plant material. Even if the correct plant _ material is available, the amount of _~ variation present in a species or variety in different regions of the country may result in replacement with a slightly different plant. Replacement of extant historic material through propagation avoids these problems and ensures perpetuation of historic plant species and varieties.

In some instances, replacement of the original species or variety may not be possible. This may be due to changes in the site's growing conditions, disease, or simply because the original is no longer available or has disappeared from cultivation. In either case, substitution is sometimes necessary. In decisions on substitution, care should be taken to match the visual, functional, and horticultural characteristics of the historic plant as closely as possible. These attributes include the form, shape, and texture of the original, as well as its seasonal features such as bloom time and color, fruit, and fall foliage.

There are certain plants with such distinctive characteristics that it may be virtually impossible to duplicate their visual effect. This is true in the case of the unique, umbrella-like shape of the American Elm, *Ulmus americana.* The elm, once the great American street tree, has been reduced in number due to Dutch Elm disease, *Ceratocystis ulmi (Buisman).* Yet its form is impossible to replicate making decisions about an acceptable substitute material very difficult. As a result, some historic landscape managers have continued to plant American Elm or the new disease resistant variety known as Liberty Elm, U. *americana 'Liberty.'*

Another example of a plant which is difficult to substitute is the Flowering Dogwood, *Cornus florida* and its close relative, the Western Dogwood, C. *nuttalli.* Both are native trees, used extensively for their distinctive shape and showy white bracts. They have been seriously affected by an anthracnose disease which causes gradual loss of the lower branches and foliage. Unfortunately, replacement with the same species is impractical since the disease may re-infect the new tree. No alternative provides the exact combination of form, size, bloom time, and bloom color, let alone the fruit and fall foliage characteristics. In these cases it is important to determine what the most critical aspects of the plant are in their given location, and reproduce a limited number of characteristics to the greatest extent possible. Substituting another dogwood species, such as the Chinese Dogwood, *Cornus kousa* may not be an acceptable alternative if the time of bloom is critical to an overall effect. Thus, substitutions for a given plant species may vary on a site to site basis.

Similar issues arise in the replacement of flowering perennial or annual plant material, such as is used in borders or beds. In this case, careful decisions must be made regarding the historic period and the selected treatment. Certain nonwoody perennial plants are quite long-lived and an effort should be made to determine if any of the historic plant material remains. If it is necessary to replace perennial plant material, the selection should be based on site records as well as other documentary evidence which provides information on the use and introduction of plants during the historic period. It is also important to determine the height, color, and seasonal qualities of the original planting in order to select accurate replacement plants. If substitution of the historic plant is necessary, then the selection should ensure that the historic effect is reproduced to the maximum extent possible. If the site research turns up very little site and species-specific information, then the visual effect should be followed as closely as possible.

In summary, extant historic plant material should be retained and propagated whenever possible to ensure continuity of the living historic fabric. Plant material that cannot be, or was not propagated before it was lost should be identified and replaced in-kind. If it is determined that replacement with new plants or substitution of the historic plant material is necessary, it is important to keep accurate site records, to allow future generations to distinguish between historic fabric and later alterations and additions to the landscape.

Conclusion

Historic vegetation must be recognized as an integral part of the fabric of most historic properties and should be considered during any preservation effort. Although considering plant material as historic fabric raises new preservation issues not encountered with inanimate materials, the opportunity exists for long-term perpetuation of this living historic fabric through propagation.

Stewardship of historic properties should, to the maximum extent possible, include the preservation of historic plant material to prevent further loss of historic species and cultivars. National leadership in historic species cultivation and propagation is greatly needed if we are to continue preserving historic landscapes. Partnerships should be developed between Federal, state, and local governments and private organizations which manage historic landscapes, and arboretums and agricultural colleges who propagate historic varieties, store genetic material, and train arborists and horticulturists in historic landscape management.

Perhaps the best thing we can do to preserve historic landscapes is to increase skill, knowledge, and attention to vegetation management at each historic site. Management of historic properties should routinely include active management of historic vegetation including propagation, repair and, when appropriate, removal and replacement of historic plant material. These objectives will help ensure the continuation of the living historic fabric, part of a rich historic document, the landscape.

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Preservation Issues for Living Historic Fabric

Vegetation is a dynamic material, subject to seasonal change as well as the cycle of growth, maturity, and decay. As a result, many of the traditional approaches to preservation practice for inanimate objects need to be modified for preservation of this living historic fabric.

1. Integrity is a difficult concept to evaluate in landscapes, since the growth and death of vegetation can have a tremendous effect on the character of the property. Simple actions such as deferring maintenance can result in the loss of significant, character-defining vistas, or the death of important vegetation features. At the same time, the loss of some plant material such as annuals or perennials does not necessarily compromise the integrity of the landscape since many are inherently short-lived and subject to constant removal and replacement. Thus, when evaluating the integrity of the landscape, it is important to keep the dynamics of the existing vegetation in mind while attempting to preserve or restore the historic appearance of the site.

2. Most historic landscapes have evolved over a long period of time, which complicates preservation decisions. It may be difficult to interpret or accurately replicate the appearance of a landscape during its identified period of significance since the vegetation may have grown or changed considerably. It may be both inappropriate and too costly to remove mature vegetation in order to replace it with younger seedlings. Though this solution may replicate the property's appearance at a specific point in time, it may also result in the unnecessary removal of important historic fabric.

3. In planning a preservation treatment it is important to understand the historic intent, function, and appearance of the individual vegetation feature in order to assess its contribution to the historic character of the property as a whole. Consideration should also be given to the type, form, and arrangement of plantings, as well as the historic "finish" of the feature: was it intended to be clipped or simply left to its natural growth habit? Answering questions such as these is essential before beginning any preservation treatment.

4. Historic plant material which contributes to the character of the property should be retained. Most vegetation associated with historic properties does not survive or retain its character without management and intervention. Thus, ongoing maintenance becomes an important component of landscape preservation.

5. If the historic plant is still extant, then proper identification and propagation will provide identical material, should replacement be necessary in the future. Since vegetation has a distinct life: lasting anywhere from one to several hundred years, replacement with new living material is inevitable. Propagation ensures both the retention of the historic species and appropriateness of the replacement.

6. In some instances, replacement with a compatible substitute species may be required because the original material is no longer extant or available. This may prove difficult due to the lack of accurate documentation. Landscapes, including their primary component, vegetation, are generally less documented than historically significant buildings. However, site-specific information on historic plants can often be found in historic photos, diary entries, or household records. Many plants have been reclassified in the intervening years, and it may take a trained horticulturist or plant taxonomist to interpret the notations or photographs. For plant species introduced through the nursery trades, information on their historic distribution and availability may also assist in identification.

7. Other factors may affect the choice of an appropriate substitute species. Disease and other pests introduced since the historic period may make in kind replacement difficult or impossible. In addition, many historic species have disappeared from active cultivation

because of changes in style and agricultural technology. Other historic varieties have been replaced with hardier, disease-resistant, or more productive varieties. The on-going loss of many species from cultivation makes accurate restorations even more difficult.

Sources of Additional Information

American Association of Botanical Gardens and Arboreta
Wayne, Pennsylvania

Public arboretums and botanic gardens are a terrific source of technical information; many have libraries, collect specific plants, offer classes, and conduct detailed research. The Association has published a guide, the Plant Collections Directory, which lists all participating botanic gardens and arboreta, specializations, research activities, and an index of plant families, genera, and species. For information, contact the American Association of Botanic Gardens and Arboreta, 786 Church Rd., Wayne, PA 19087.

Antique Plant Newsletter
Dover, Delaware

The newsletter contains a wealth of information on sources of plant material as well as "who's doing what." It is published and edited by Dr. Arthur O. Tucker, Dept. of Agriculture and Natural Resources, Delaware State College, Dover, DE 19901.

Frederick Law Olmsted National Historic Site, NPS
Brookline, Massachusetts

The Olmsted Site conducts annual workshops for horticulturists, gardeners and managers working in historic landscapes in the northeast. For information, contact Charles Pepper, Supervisory Horticulturist, Olmsted NHS, 99 Warren Street, Brookline, MA 02146.

Heirloom Vegetable Garden Project, Cornell University
Ithaca, New York

The project conducts research on historic varieties and have produced an interesting bulletin on heirloom vegetables. For information, contact Robert Becker, Heirloom Vegetable Garden Project, 157 Plant Science Building, Cornell University, Ithaca, NY 14853.

Massachusetts Horticultural Society
Boston, Massachusetts

The MHS library is extensive, including historic nursery catalogs, journal, and horticultural texts. For information, contact Walter Punch, Librarian, 300 Massachusetts Avenue, Boston, MA 02115.

National Agricultural Library
Beltsville, Maryland

In addition to being an excellent agricultural library, the USDA library has a rare book room with many historic horticultural texts. Contact: Special Collections, National Agricultural Library, 10301 Baltimore Blvd., Beltsville, MD 20705-2351.

National Arboretum
Washington, DC

The National Arboretum maintains a germplasm lab for fruits, ornamentals and food crops and an extensive herbarium. Ongoing research on many genera is helping to produce hardy, varieties. Occasionally, historic species are propagated and introduced back into cultivation through the nursery trade. For information on programs and facilities, contact: National Arboretum, 3501 New York Avenue, NE, Washington, DC 20001.

Old House Gardens
Ann Arbor, Michigan

Scott Kunst has prepared an excellent "Source List for Historic Seeds and Plants" including general catalogs, ornamentals (annuals, perennials, shrubs, trees, spring and summer bulbs, and old roses), house plants, edible and useful plants (fruits and

vegetables) as well as plant search services. For information contact Scott Kunst, Old House Gardens, 536 Third Street, Ann Arbor, MI 48103.

Soil Conservation Service

SCS manages 26 plant materials centers and have recently developed a cooperative agreement with the National Park Service to share technical information on native plant material for revegetation. For further information, contact: William R. Beavers, Natural Resource Specialist, DSC, 12795 West Alameda Parkway, P.O. Box 25287, Denver, CO 802250287.

Thomas Jefferson Center for Historic Plants

Charlottesville, Virginia

The center documents, collects, propagates and sells historic plant varieties found in American gardens prior to 1900, including many of the plants used by Thomas Jefferson. Contact: Mr. John T. Fitzpatrick, Director, The Thomas Jefferson Center for Historic Plants, Monticello, P.O. Box 316, Charlottesville, VA 22902.

Seed Saver's Exchange

Decorah, Iowa

The Exchange produces a biannual publication listing sources and locations of heirloom vegetables and herbs. For information, contact Kent Whealy, P.O. Box 70, Decorah, IA 52101.

University of Delaware Library

Newark, Delaware

The library has a substantial collection of historic horticultural texts and nursery catalogs, specializing in late 19th to early 20th century publication. Contact the University Library, Special Collections, University of Delaware, Newark, DE 19717.

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The authors wish to thank Charles Pepper, Supervisory Horticulturist at the Olmsted National Historic Site and John Fitzpatrick of the Thomas Jefferson Center for Historic Plants for technical information as well as Scott Kunst and Arthur Tucker for their published sources of information.

Park Cultural Landscape Workshop

Robert R. Page

On September 18-20, 1990, the Park Historic Architecture Division in Washington, DC sponsored a Park Cultural Landscapes Workshop at The Lyceum in Old Town Alexandria, Virginia. The primary purpose of the workshop was to develop a multi-year work plan for the Park Cultural Landscapes Program. In order to ensure that the work plan would be comprehensive and ad- dress the issues faced in managing the diverse cultural landscapes in the National Park System, the Division requested the participation of professionals actively involved in the management and treatment of park cultural landscapes Servicewide. The participants represented a variety of disciplines from offices throughout the Service.

Gerry Patten, director, North Atlantic Region and past president of the American Society of Landscape Architects (ASLA), highlighted central issues to be addressed in the workshop. In his opening presentation he stressed the need to approach the program's development in an interdisciplinary fashion, coordinating with other park programs and developing professional coalitions. In addition, he recommended developing alliances with other agencies and pursuing partnerships with organizations such as the ASLA and the Alliance for Historic Landscape Preservation. Finally, he emphasized the need for a cultural landscape theme study in order to incorporate landscapes into the national preservation priorities.

Over the course of three days, the participants were involved in presentations and discussions related to the various components of park cultural resources management, including definitions, management inventories, evaluation, documentation, the planning process, treatment and management. The discussion was, at times, intense and a variety of opinions were expressed regarding appropriate courses of action. However, a consensus was reached regarding some high priority issues which will be addressed over the next year: 1) a Cultural Landscapes Inventory (CLI) database will be developed for initiation in 1992 with the $300,000 currently designated for the CLI in the draft National Park Service FY 1992 Budget Justification, 2) a historical landscape architect will be a member of the "Cultural Resources Management Guideline NPS-28" Task Force for the first time and will present the recommendations of work groups for revising and supplementing the guidelines and technical information pertaining to cultural landscapes, 3) measures will be taken to improve compliance under Section 106 regarding cultural landscapes, 4) funding will be pursued to conduct a National Historic Landmark Theme Study of park landscapes designed for visitor use, interpretation, and/or administrative purposes under the management of NPS, including state and metropolitan parks designed by NPS and executed by the CCC in the 1930s, and 5) funding will be pursued to develop a manual for park management which outlines a methodology for assessing the impact of agricultural change on the historic scene of battlefields, in light of the Secretary of Interior's American Battlefield Protection Program.

A draft of the program's work plan is being prepared which will outline program goals, objectives and tasks. The work plan will establish priorities at the task level and a time line for its accomplishment. The draft will be disseminated to the workshop participants for informal review and comment. Subsequently, a formal review by the regional offices and other appropriate offices will occur. Based on the final work plan, work groups will be convened to address the tasks outlined. It is important to note that the work plan which will be developed is for the Servicewide Park Cultural Landscape Program and not just the Washington Office. Therefore, completion of the tasks outlined is dependent upon the involvement of people in the regions, parks and the Denver Service Center who have the appropriate expertise and are interested in participating.

The workshop provided the first opportunity to bring together a majority of the individuals involved in park cultural landscapes to identify issues, share ideas and reach a consensus regarding the future direction of the Park Cultural Landscapes Program. The work plan which results will provide the framework to implement and institutionalize the program in the National Park Service. There is a lot of work to be done. However, the enthusiasm and commitment exhibited by all who participated in the workshop is a positive indication of the feasibility of bringing the program's goals to fruition.

Any individual who would like a copy of the draft work plan or is interested in participating in a work group should contact Robert R. Page, Park Historic Architecture Division, National Park Service, P.O. Box 37127, Washington, DC. 200137127, 202/FTS 343-8145.

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Dogwatch

The National Register and Historic Ships

James P. Delgado

"Dogwatch" is the term traditionally used for the two-hour watch during which half the ship's crew eats supper and swaps stories

The National Maritime Initiative maintains an inventory of historic maritime resources in the United States. In its soon-to-be-published inventory of preserved historic vessels, the Initiative lists 332 large (greater than 40' in length) historic vessels, 245 of which are actively being preserved as exhibits, adaptively used businesses, or as operating historic attractions. Most of these vessels are more than 50 years old, and nearly all potentially would meet the criteria for listing in the National Register of Historic Places.

However, there are currently 170 large historic vessels in the United States listed in the National Register—only 51% of the presumably eligible candidates for listing. The fact that 51% of these vessels are listed is due for the most part to two factors—the preparation of multiple property listings by the states of Maryland and Florida, respectively, for skipjacks and spongeboats, and the National Historic Landmarks Program, which in 1985-1986 studied World War II warships associated with the War in the Pacific, and, in cooperation with the National Maritime Initiative, has studied large preserved historic vessels as part of a larger "Maritime Heritage of the United States" theme study since 1988.

Analysis of the statistics of the National Register-listed vessels shows a slow growth in listings through the 1960s, '70s, and early '80s. In 1966, eight ships were listed—*Star of India, C.A. Thayer, Olympia, Constitution, Ticonderoga, Charles W. Morgan, Philadelphia,* and *Constellation*—all of them National Historic Landmarks, which were automatically listed in the National Register The only listing for 1967 was another NHL, and no further listings occurred until 1970, when 3 ships were listed. These, significantly, were not NHLs, and thus 1970 marks the first year that the National Register was employed for assessing historic ships, in these cases with the riverboat *Delta Queen,* the towboat *W.P. Synder, Ir.*, and the schooner *Wawona.*

Sporadic listings followed—1 ship in 1971, 6 ships in 1972, 4 in 1973, 3 in 1975, 7 in 1976, 2 in 1977, and 7 in 1978. The first "peak" year was 1979, when 10 ships were listed at a time when grant funds were available for maritime preservation. Five ships were listed in 1980, followed by only 1 in 1981, 7 in 1982, and again 10 ships in 1983 and 7 in 1984. Then, in 1985, 27 ships were listed, most of them Maryland and Virginia skipjacks and bugeyes. Thirteen ships were listed in 1986—most of them WWII warships. In 1987 and 1988, the numbers dropped again to respectively 5 and 1, and then soared once more in 1989 to 27 listings, this time the result of the National Maritime Initiative NHL study. There have been 10 listings in 1990, only 2 of which thus far have been NHLs—the others have been SHPO-submitted nominations, including a group of Florida spongeboats.

The active roles played by some states in listing their historic vessels is shown in the apportionment of listings— Maryland is in the lead with 33 vessels, followed by California with 16. Washington and Massachusetts are tied with 12 ships each, followed by New York with 9 vessels.

The completion of the NHL study of large preserved historic vessels is scheduled for next year, when the last 42 ships requiring NHL evaluation are studied. However, this will not assess most of the other ships not yet evaluated for the National Register. Nearly a third (35) of the 83 ships designated as NHLs have been previously listed on the National

Register, and 18 of the 42 ships to be studied are now listed. This leaves 152 ships that could, and should be evaluated for the National Register. The National Maritime Initiative is ready and willing to assist vessel owners, managers, operators, and State Historic Preservation Officers in this important process.